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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,955	03/25/2004	Henry W. Sullivan	Tie Tek-001:D	6356

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THE MATTHEWS FIRM
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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/808,955

Applicant(s)

SULLIVAN ET AL.

Examin r

Joseph S. Del Sole

Art Unit

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-- Th MAILING DATE of this communication appears on th cover sheet with the corres ndence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 (renumbered 12, 18-28 and 51-67) is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Priority

2. This application filed under former 37 CFR 1.60 lacks the necessary reference to the prior application. The current status of all nonprovisional parent applications referenced should be included, i.e. "filed on March 5, 2001, which is pending." should be changed to -- filed on March 5, 2001, and now US 6,828,372 B1--.

Claim Objections

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 12, 18-28 and 51-67 have been renumbered 1-29 respectively. Claims 27 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to properly further limit the subject matter of a

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previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 27 was improperly made dependent on later claim 28 and claim 28 was made dependent on claim 27 thereby making the claim circularly dependent on itself.

5. Claims 1-17 are objected to because of the following informalities: **a)** "said member capable of moving" of claim 1, line 5 should be changed to --said member is capable of moving--; and **b)** "material may fed into" of claim 2, line 3 should be changed to --material may be fed into--. Appropriate correction is required.

Double Patenting

6. Applicant is advised that should claims 1, 13, 14 and 16 be found allowable, claims 2, 4, 5 and 6 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5-9 and 17-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 5 is vague and indefinite because it is unclear whether both a gear and a brake are part of the claimed invention or just one.

Claim 6 is vague and indefinite because it is unclear what a "mech valve" is.

Claim 7 is vague and indefinite because it is unclear whether both a tail stop and a sensor are part of the claimed invention or just one.

Claim 8 is vague and indefinite because it is unclear whether "a mold with at least one end" is the same mold or a different mold from the mold of parent claim 2.

Claim 17 is vague and indefinite because it is unclear whether a Banbury mixer is begin used or an other mix is being used.

Claim 17 is vague and indefinite because it is unclear whether both a tail stop and a sensor are part of the claimed invention or just one.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-9 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Fritsch (3,477,101).

Fritsch teaches an apparatus having a mold (Figs 6 and 7, #26) having at least one side wall (Fig 7, #16) defining an interior portion and an injector port (Fig 7, #14) whereby an extrudable material may be injected through the injection port into the mold; a member (Fig 7, #27) whereby the member is in sealable connection about the interior

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portion; the member is capable of moving along the interior portion of the mold whereby the member may adjustably control a density of extrudable material; the controlling member is a back pressure piston (Fig 7, #27); the member includes a brake (Fig 7, #s 31, 32 or 33) and a gear (Fig 7); a mech valve to shut off the flow of the material and a tail stop/ sensor to indicate when the valve should shut (as claimed, the stoppage of worm 17 reads on a mech valve; col 5, lines 60-70); the mold (Figs 6 and 7, #26) having at least one end (Fig 7, #27) wherein the mold further has a rod (Fig 7, #23) on or about at least one end; the end and rod are pushed outwardly as the mold fills and the rod is detected by a sensor when the mold is filled (col 5, lines 60-70).

11. Claims 1-6 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Valyl (5,082,604).

Valyl teaches an apparatus having a mold (Figs 1, #4) having at least one side wall (Fig 1, #5) defining an interior portion and an injector port (Fig 1, #8) whereby an extrudable material may be injected through the injection port into the mold; a member (Fig 1, #7) whereby the member is in sealable connection about the interior portion; the member is capable of moving along the interior portion of the mold whereby the member may adjustably control a density of extrudable material; the controlling member is a back pressure piston (Fig 1, #7); the member includes a brake and a gear (Fig 1); a mech valve to shut off the flow of the material (Fig 1, #10).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fritsch (3,477,101) or Valyl (5,082,604) in view of Von Holdt, Sr (5,380,184).

Fritsch and Valyl each teach the invention as discussed above.

Fritsch and Valyl each fail to teach a means to divert the material to another mold that is not filled, the means being a diverter valve and a first and second diverter station.

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Von Holdt, Sr teaches a diverter valve (Fig 2, #32) for the purpose of alternately feeding a first (Fig 3, #18) and second (Fig 3, #20) diverter station (col 1, line 55 - col 2, line 5).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the inventions of Fritsch and Valyl with a diverter valve as taught by Von Holdt, Sr because it would enable multiple products to be made with multiple molds each alternatively supplied by a single source.

Allowable Subject Matter

16. Claims 17-29 would be allowable if rewritten or amended to overcome the objections and the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Joseph S. Del Sole

J.S.D.

January 6, 2005